Journal of Fluid Mechanics Volume 502 **10 March 2004**

M. Colombini	Revisiting the linear theory of sand dune formation	1
R. C. A. Hindmarsh	Thermoviscous stability of ice-sheet flows	17
N. B. Kaye & P. F. Linden	Coalescing axisymmetric turbulent plumes	41
B. Mazzi & J. C. Vassilicos	Fractal-generated turbulence	65
D. Vella, H.-Y. Kim & L. Mahadevan	The wall-induced motion of a floating flexible train	89
J. M. Lopez, F. Marques, A. H. Hirsa & R. Miraghaie	Symmetry breaking in free-surface cylinder flows	99
B. Lindgren, J. M. Österlund & A. V. Johansson	Evaluation of scaling laws derived from Lie group symmetry methods in zero-pressure-gradient turbulent boundary layers	127
P. Carrière, P. A. Monkewitz & D. Martinand	Envelope equations for the Rayleigh–Bénard–Poiseuille system. Part 1. Spatially homogeneous case	153
D. Martinand, P. Carrière & P. A. Monkewitz	Envelope equations for the Rayleigh–Bénard–Poiseuille system. Part 2. Linear global modes in the case of two-dimensional non-uniform heating	175
Q. Sun & I. D. Boyd	Flat-plate aerodynamics at very low Reynolds number	199
E. S. Benilov	Stability of vortices in a two-layer ocean with uniform potential vorticity in the lower layer	207
P. Ramaprabhu & M. J. Andrews	Experimental investigation of Rayleigh–Taylor mixing at small Atwood numbers	233
Y. Morinishi, S. Tamano & K. Nakabayashi	Direct numerical simulation of compressible turbulent channel flow between adiabatic and isothermal walls	273
C. D. Eastwood, L. Armi & J. C. Lasheras	The breakup of immiscible fluids in turbulent flows	309
A. Stegner, P. Bouruet-Aubertot & T. Pichon	Nonlinear adjustment of density fronts. Part 1. The Rossby scenario and the experimental reality	335
R. Paoli, J. Hélie & T. Poinsot	Contrail formation in aircraft wakes	361
Book Reviews		
Air-Sea Interaction. Laws and Mechanisms, by G. T. Csanady		374
Computational Rheology, by R. G. Owens & T. N. Phillips		375
Aeroacoustic Measurements, by T. J. Mueller		376
Index to Volume 502		378
Schedule of International Conferences on Fluid Mechanics		380

CAMBRIDGE UNIVERSITY PRESS

Cambridge Journals Online
journals.cambridge.org

0022-1120(200403)502;1-F